



Response Under 37 C.F.R. § 1.116 -  
Expedited Procedure -  
Examining Group 3752  
Attorney Docket No.: 051252-5028

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

William James IMOEHL

Application No.: 09/474,766

Filed: December 30, 1999

For: FUEL INJECTOR WITH THERMALLY  
ISOLATED SEAT

Group Art Unit: 3752

Examiner: C. Kim

**REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116**

**BOX AF**  
Commissioner for Patents  
Washington, D.C. 20231

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APR 24 2001

TECHNOLOGY CENTER R3700

Sir:

The final Office Action dated 20 November 2000 (Paper no. 7), the period for response to which has been extended to 20 April 2001, by a request for a two-month extension of time submitted herewith, has been reviewed and the comments of the U.S. Patent and Trademark Office have been considered. Applicant respectfully submits the following remarks. Claims 1 - 17 are currently pending in the application.

Claims 5, 6, and 10 were rejected under 35 U.S.C. § 112, first paragraph. Specifically, the Office Action asserts that the specification does not disclose a first surface of a swirl generator disk being adjacent an armature nor a first surface of a guide disk adjacent an armature, as recited in claim 5, and does not disclose a first surface of a swirl generator disk adjacent an inlet portion of a body nor a first surface of a guide disk adjacent an inlet portion of a body as recited in claim 10. As the Office Action indicates, the definition of "adjacent" includes "close to." Applicant respectfully assert that Figures 1 and 2 show examples of a first surface of a guide disk 78 and a first surface of a swirl generator 80 adjacent or close to an armature, as well as a first surface of the swirl generator disk and a first surface of the guide disk adjacent or close to an inlet portion of a

body. Thus, it is respectfully submitted that the claims fully comply with 35 U.S.C. § 112, and that the rejection to these claims be withdrawn.

Claims 1 - 3, 8, 9, and 11 - 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,145,761 to *Muller et al. (Muller)* in view of U.S. Patent No. 5,170,945 to *Daly et al. (Daly)* and in view of U.S. Patent No. 4,434,766 to *Matsuoka et al. (Matsuoka)*. Claims 4 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Muller* in view of *Daly* and *Matsuoka*, and further in view of U.S. Patent No. 5,330,100 to *Malinowski*. Claims 7 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Muller* in view of *Daly* and *Matsuoka*, and further in view of U.S. Patent No. 6,068,495 to *Virchow*. Applicant respectfully traverses these rejections.

Each of independent claims 1, 8, and 12 includes combinations of features that are not shown or suggested by *Muller*, *Daly*, *Matsuoka*, *Malinowski*, or *Virchow*, either when taken alone or in combination. Specifically, claim 1 recites a combination of features including “a seat proximate the needle and having a first face, a second face, and a circumferential surface disposed between the first face and the second face, the circumferential surface including a first zone and a second zone that are connected by an intermediate zone extending substantially perpendicular to the first and second zones, the intermediate zone contiguously engaging the body; and a seal disposed between the second zone of the seat and the body so that the seal thermally isolates the second zone of the seat from the body.” Claim 8 recites a combination of features including “a seat having a first face, a second face, and an circumferential surface disposed between the first face and the second face, the circumferential surface including a first zone and a second zone that are connected by an intermediate zone extending substantially perpendicular to the first and second zones, the intermediate zone contiguously engaging the body, and the second zone being thermally isolated from the body.” And claim 12 recites a combination of features including “a seat having a first face, a second face, and a circumferential surface disposed between the first face and the second face, the circumferential surface including a first zone and a second zone that are connected by an intermediate zone extending substantially perpendicular to the first and second zones [, . . and] thermally isolating the second zone of the seat from the body.”

It is respectfully submitted that *Muller*, *Daly*, *Matsuoka*, *Malinowski*, and *Virchow* do not teach or suggest the combinations of features recited in Applicant’s independent claims 1, 8, and

12. The Office Action asserts that the references teach various features of Applicant's invention, however it is respectfully submitted that these references, whether considered alone or in combination, fail to suggest Applicant's invention as a whole. Specifically, none of the references show a seat having a circumferential surface including first and second zones connected by an intermediate zone extending perpendicular to the first and second zones, with the second zone thermally isolated from the body. For at least these reasons, Applicant respectfully requests that the rejection of the independent claims be withdrawn and the claims allowed.

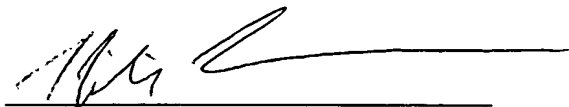
Claims 2 - 7, 9 - 11, and 13 - 17 depend from independent claims 1, 8, or 12, and are therefore also allowable for at least the same reasons. Thus, Applicant respectfully requests that the rejections of these claims be withdrawn and the claims allowed.

In view of the foregoing remarks, Applicant respectfully requests reconsideration and allowance of the claimed invention. The Examiner is invited to contact Applicant's representative if any issues remain unresolved.

**EXCEPT** for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0310. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,  
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Dated: April 20, 2001

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